Pest Update (September 26-October 3, 2012)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do <u>not</u> send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:

http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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Current Concerns



There have been lots of calls, emails, and samples of pines losing needles in the last couple of weeks. This is the normal shedding of the older needles that occurs every year at about this time. Most pines shed their three-year old needles in September and early October. This is usually not a concern as the needles fall over an extended time period and often goes unnoticed by the tree owner. The dry summer appears to have caused the pines to

drop their needles very quickly this year and it is common to see mature ponderosa pines will a thick layer of fallen needles beneath them! Regardless this is not a cause for concern or alarm. If you receive a call about a pine losing its needles, ask the caller if the needles are falling from the branch tips or the interior. If it is the interior, it is just the normal shedding and not a cause for concern.



But I am also receiving numerous samples and pictures of spruce that look like this picture — older needles turning reddish-brown and shedding and only the current year's needles remaining. This is more than just the normal needle drop (typically the 5 to 7 year old needles of spruce drop in the fall) but most likely due to the heat/drought stress from this summer. The most common question asked when the sample comes in is

"Should I have been watering?" Yes, and that leads to the next topic - watering



Fall is upon us and we need to be thinking of winter. Remember now is the time to be watering your trees, not just before the soil freezes. We have not had had sufficient rains in much of the state this late summer and if you are in an area that has not received at least 3 inches of precipitation in the last month you may want to begin watering the trees, particularly the young, newly planted ones. I have received a lot of conifer samples that have the

symptoms of drought-stress and my field visits in West River locations certainly indicate the trees are dry. Watering now is the best way to reduce winter-burn and winter-kill. I expect there will be a lot of re-plants in windbreaks next spring if we have another open, dry winter.



Imprelis herbicide tree injury update. Imprelis applied to turfgrasses has been associated with tree injury throughout the country, including South Dakota. Most of the suspected cases have been West River, particularly the Rapid City area with a number of homeowners having trees that may have been injured by this herbicide since Imprelis was applied by at least one lawn care company a year ago or longer. The major issue is not so much drift as root uptake so the tree injury

shows up only on the trees in the lawn where the herbicide was applied. The typical symptoms of trees injured by the herbicide are yellowing and curling foliage on the current year's growth (the chemical accumulates in the growing tips). Spruces, a common tree species in the lawns where Imprelis was applied are showing stunted needles that are often pale or near yellow on the newest growth and sometimes the previous year's growth. The only treatment for injured trees is watering – particularly important during this dry year. The chemical has a fairly short life so most likely if a tree is not expressing any symptoms by now it will be okay. Trees that only are showing a few brown tips will also most likely recover if watered.

E-samples



An unusually pest has been turned up in South Dakota this fall. This is the spruce gall midge (*Mayetiola piceae*), a small insect that lives in the tips of spruce branches. The infested tips become swollen, often resembling miniature corn smut, and once the adults emerge in the spring, and these galls have numerous holes. The problem is more common on white spruce (Black Hills spruce) than blue spruce but rarely covers the tree. There is no control other than pruning out the galls in the winter and destroying them to kill the enclosed adults.



Elytroderma needle cast occurs in western South Dakota but I only occasionally get samples as it is often misidentified as Dothistroma needle blight or even Diplodia tip blight. The symptoms have some similarities to these diseases, but generally the older needles on infected trees will turn red or brown and fall prematurely and only the most current needles will remain green. Obviously this symptom pattern can also occur with abiotic stressors. However, the formation of witches brooms on infected trees, which occurs on trees that have been infected for years, is a good clue. I received this picture

of a witches' broom that is fairly characteristic of the disease.

Samples received

Faulk County

What is this apple?

Apple identification is mostly an educated guess as there are numerous cultivars with similar color, size, ripening time, etc. but this sure looks like a Haralson.

Jackson County

Is this cedar-apple rust and

can it be treated this fall?

This is cedar-apple rust on the apple and despite the dry conditions I have seen lots of West River apple trees infected with this disease. The disease cannot be treated now, instead the control is applied in the spring as the leaves are just about fully expanded (this is also the time when the galls are opening on the juniper (cedar) trees) and repeated for at least three times about 10 days apart. I'll make a fungicide recommendation next spring once we see what will be available to homeowners next year.

Minnehaha Couny FL1200058

Just need an ID.

This Minnesota sample is green ash (*Fraxinus pennsylvanica*). One of the two samples showed the galls that are ash flower gall created by a small mite.

Perkin County

This is from a group of young spruce trees planted last spring. The needles are dropping and we wonder if it is due to needlecast?

No symptoms or signs of the disease were found on the sample. I suspect this is another case of heat/drought stress.

Perkin County These are 16 Colorado spruce that are 20 years old and were transplanted about 4 years ago. The trees were doing well until this year.

I would suspect that the trees are showing symptoms of cytospora canker since they are at the age where the bluish-white resin blisters appear and the problem tend to occur earlier on trees that are drought-stressed. These were fairly large trees when they were transplanted so they are still recovering and combined with the summer heat/drought they are still very stressed trees. The only solution is watering and mulching to restore the health of these trees.

Union County FL1200060 declining? Is it drought?

Why is this spruce

Yes, all the symptoms, older needles discolored and shedding, are consistent with heat/drought injury.